

## ATM/POS bridge



Security Systems

**EN** | Installation Manual

**BOSCH**



# ATM/POS Bridge

Installation manual

## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this unit during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**CAUTION**

This unit has a battery inside the enclosure. Risk of explosion if battery is replaced by incorrect type. Dispose of used battery in an environmentally friendly way. Do not dispose of the battery with other solid waste.

**Remark**

Bosch has a strong commitment towards the environment. This unit has been designed to respect the environment as much as possible.

**FCC & ICES INFORMATION**

(U.S.A. and Canadian Models Only)

This is a Class B product. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.





# ATM/POS bridge

## Table of Contents

1.	ATM/POS bridge .....	3
1.1	Package contents .....	3
1.2	Supported protocols .....	3
1.3	Mounting .....	3
1.4	Applications .....	4
1.5	Connections .....	5
2.	Configuration .....	7
2.1	How to set up a HyperTerminal session .....	7
2.2	Configuration menus .....	8
3.	Connectors .....	11
4.	Troubleshooting .....	12
5.	Technical specifications .....	13

## SAFETY PRECAUTIONS

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK. DO NOT OPEN!	
<b>CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</b>		

This label may appear on the bottom of the unit due to space limitations.



The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.**



Attention: Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.



Power Disconnect. Units have power supplied whenever the power cord is inserted into the power source. The power cord is the main power disconnect for all units.



The socket outlet shall be installed near the equipment and shall be easily accessible.



# 1. ATM/POS bridge

The ATM/POS bridge connects a Point-of-Sale (POS) or an Automatic Teller Machine (ATM) to a Bosch digital video recorder so that transactional data from these units can be stored and displayed with associated video recordings.

## 1.1 Package contents

Check the package for following items:

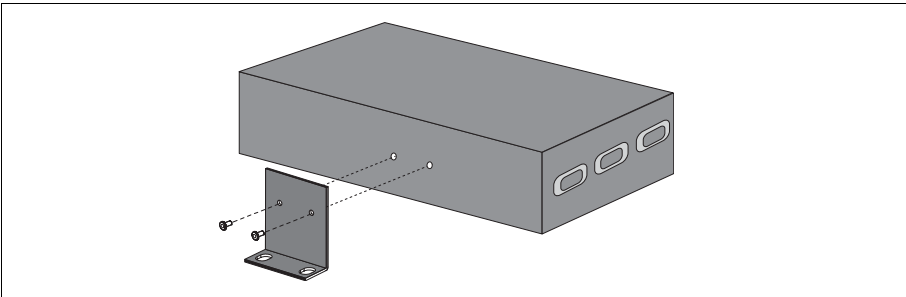
- ATM/POS bridge
- External DC power supply
- Mounting kit
- 2 connection cables and 1 console cable (with two 9-pole SubD connectors)
- Installation manual (this manual)

## 1.2 Supported protocols

The ATM/POS bridge is designed to operate with many different terminals. If you have any questions regarding the suitability of the firmware for your terminal or any other enquiries, contact your Bosch representative.

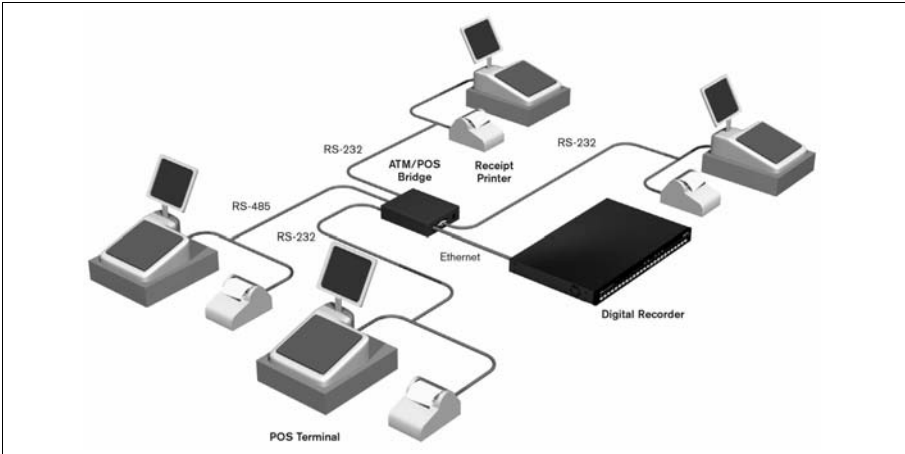
## 1.3 Mounting

Using the screws provided, attach the two mounting brackets to the sides of the bridge. Secure the brackets to a solid fixture.

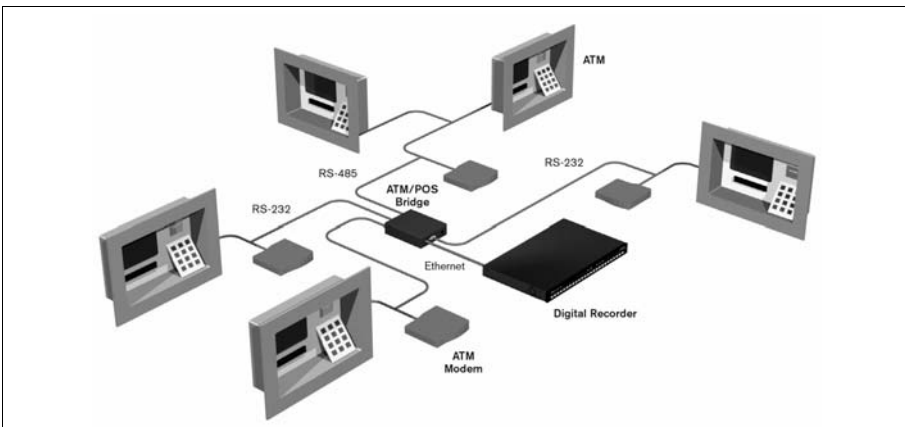


## 1.4 Applications

The following illustration shows an example of how a bridge is used in a network of digital video recorders and POS terminals.



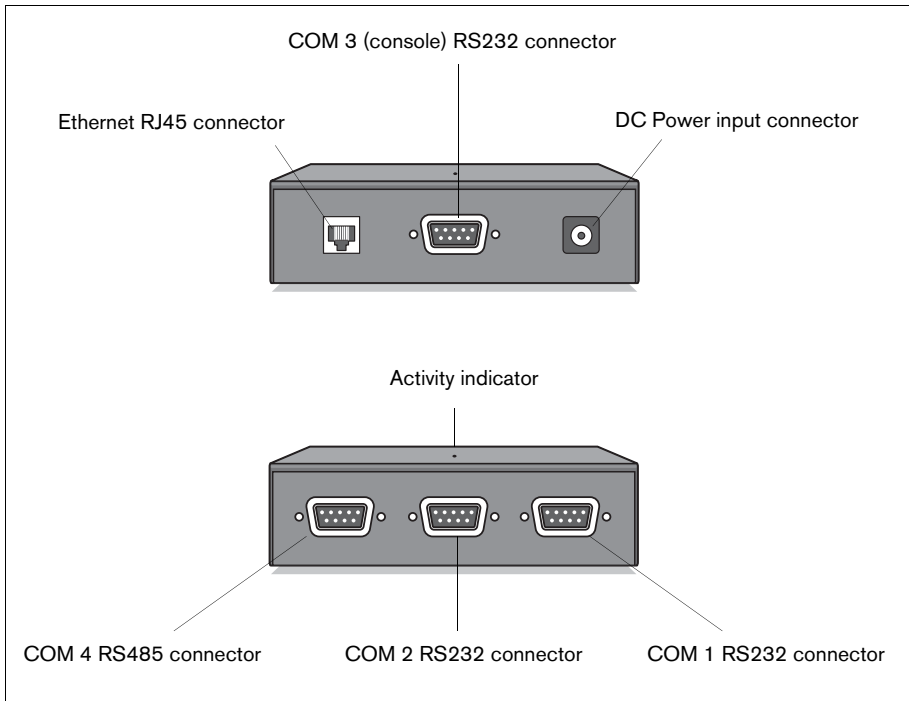
The following illustration shows an example of how a bridge is used in a network of digital video recorders and ATM terminals.



## 1.5 Connections

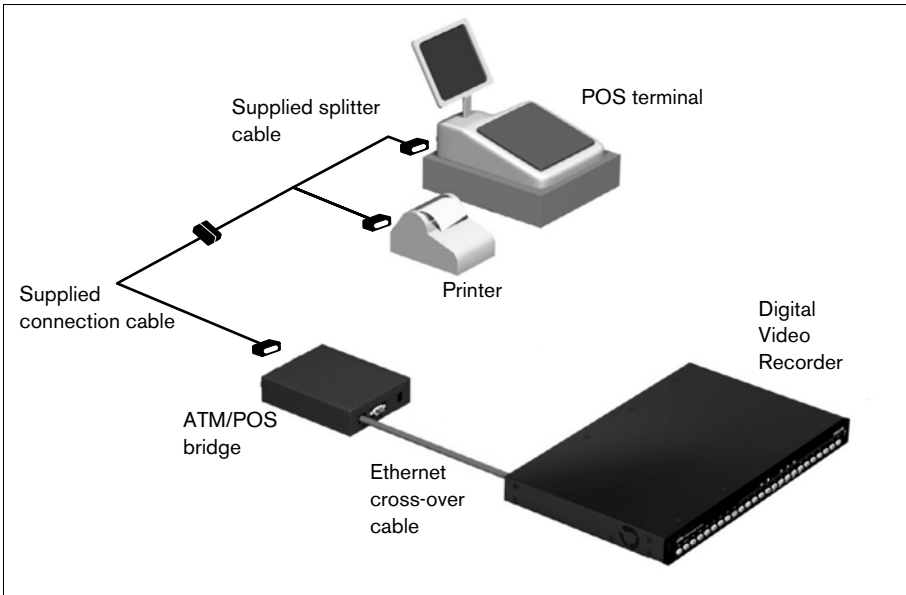
Using the supplied cables, connect the bridge as follows:

1. Connect the supplied DC power adapter unit to the DC power input connector of the bridge.
2. Connect the RJ45 connector of the bridge via a straight Ethernet CAT5 network cable to a network switch or hub that supports 10BaseT. Alternatively, the bridge can be connected directly to the digital video recorder via a cross-over cable.
3. To configure the bridge, use an RS232 cable to connect the COM3 (console) port to the serial port of a PC. If you use the RS232 console cable supplied with the bridge, ensure that the bridge is powered before connecting the cable.



4. Connect your terminal to COM port 1, 2, 3 or 4 of the bridge using the supplied cable. Choose the COM 4 port on the bridge if your connection protocol is RS485.

Normally, you would use the supplied splitter cable to make this connection. For example, you remove the existing cable that connects your terminal to the printer. Use the supplied splitter cable to connect the terminal to the printer. The third connector of the splitter cable then connects to the supplied connection cable which connects to the bridge.



To select the communication parameters for the ports and the network parameters, use a PC to start a configuration session as described below. The activity LED lights when the bridge is active.

#### Note

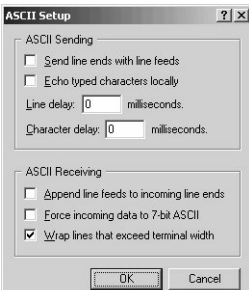
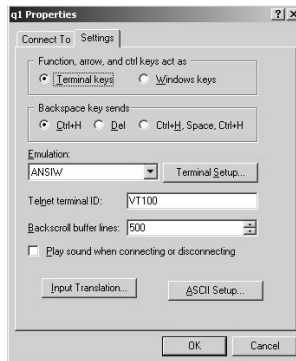
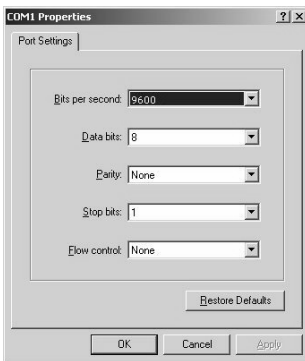
To download firmware to the bridge you must use the supplied RS232 cable connected to the COM3 (console) port. In this situation the cable must be connected to the bridge before it is powered.

## 2. Configuration

The ATM/POS bridge is configured via a PC HyperTerminal session. The PC is connected via a COM serial port to the COM 3 (console) port of the bridge. Start a HyperTerminal session on the PC to get access to the configuration menu of the bridge.

### 2.1 How to set up a HyperTerminal session

1. Start the PC HyperTerminal program in Windows (normally available under Start\_Programs\_Accessories\_Communications).
2. Enter a name for the HyperTerminal session and click OK.
3. For the connection, select the COM port number of the PC.
4. Fill in the following values for the COM port properties and click OK:



5. If the bridge is switched on, a welcome message is shown on the screen. This message prompts you to press the F1 key (a function key on your keyboard).
6. Press the F1 key; the screen displays the System Options Menu.
7. To configure the bridge, navigate through the menus using the numeric keys on your keyboard to select menu items.

## 2.2 Configuration menus

### 2.2.1 System options menu

The system options menu has 6 items:

1. Network Setup
2. Communication Channels
3. Terminal Setup
4. Simulation mode
5. Recording Language
6. Service Menu

#### Network Setup

The Network Setup submenu enables you to configure network settings and enter a bridge name:

1	Bridge Name	BRIDGE-01
2	IP-Address	192.168.10.2
3	Subnet Mask	255.255.255.0
4	Default Gateway	0.0.0.0
5	Recorder TCP Port	4200 (default)
6	Service TCP Port	4201 (default)

The MAC Address of the bridge is shown but cannot be changed.

## Communication Channels

In the Communication Channels submenu you can select one of the four COM ports to configure. The submenu that appears depends on the setting of the Comport Mode. Enter the parameters that are required for your terminal.

1	Comport Mode	Asynchronous
3	Baudrate	9600
4	Databits	8 bits
5	Parity	None
6	Stop bits	1 bit
7	Flow Control	Off

## Terminal Setup

In the Terminal Setup submenu you can select one of the four connected terminals to configure. Enter a terminal name and select the type of device connected to your terminal. Contact your local sale representative if your device is not listed in the menu for selection. Our firmware is continuously extended with new options.

1	Name	TERMINAL-01
2	Device	Epson TM-T88III (example)
3	Comm Channel	Com 1 - RS232
4	Address	0

## Simulation Mode

The Simulation Mode is used to test the connection between the bridge and the digital recorder. If this mode is selected, sample data is sent from the bridge to the digital recorder.

**Recording Language**

Select the same language that is set on the connected digital recorder. This ensures that characters are displayed correctly. The configuration menu language continues to be English.

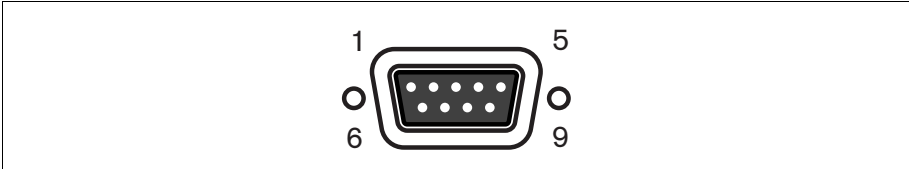
**Service Menu**

The Service Menu is used to restore the bridge to factory defaults, to reset the bridge, or to do diagnostics.



### 3. Connectors

The four COM connectors are all 9-pin SubD-type male connectors.



The following table lists the signals and pin numbers for the four ports.

Pin	COM 1 RS 232	COM 2 RS 232	COM 3 (console) RS 232	COM 4 RS 485
1				
2	Rx	Rx	Rx	D2+
3	Tx	Tx	Tx	D2-
4				
5	GND	GND	GND	GND
6				
7	RxC	RxC		
8	TxC	TxC		
9			INIT	

## 4. Troubleshooting

If you are unable to capture transaction data, perform the following steps:

1. Recheck your cables.
2. Check your TCP/IP network connection with the ATM/POS bridge. Check your gateway and subnet mask settings, they must match the digital recorder settings.
3. If the recorder has established communication with your bridge and you still cannot capture the transaction data, use the simulation mode of the bridge in the System Options Menu. The bridge will send sample transactions to the recorder in this mode.
4. Check the COM ports settings in your bridge. If the transaction data is being recorded, but shows the wrong characters, check the COM port settings. The language setting must be the same as the recorder language setting.
5. If your recorder requires an ATM/POS software license (for example, the Divar 2 digital versatile recorder), please check if this license is enabled in the System Settings - Licenses submenu of the Divar.

## 5. Technical specifications

### Electrical

Power supply:	External DC power supply (supplied) Input: 100-240 VAC; 150mA, 50/60Hz Output: 12 VDC; 450mA
Connector:	DC jack, positive center pin; 10-30 VDC; 2W

### Mechanical

Dimensions:	152 x 110 x 35 mm / 5.98 x 4.33 x 1.38 inch
Weight:	Approx. 0.6 kg / 1.3 lbs
Mounting kit:	Supplied

### Interface

Ethernet:	RJ45 shielded, 10 BaseT
Com 1 port:	9-pin SUBD male connector; RS232 synchronous or asynchronous signals according to EIA/TIA-232-F
Com 2 port:	9-pin SUBD male connector; RS232 synchronous or asynchronous signals according to EIA/TIA-232-F
Com 3 (console) port:	9-pin SUBD male connector; RS232 asynchronous signals according to EIA/TIA-232-F
Com 4 port:	9-pin SUBD male connector; RS485 asynchronous

### Environmental

Temperature:	Operating: +0°C to +45°C (+32°F to +113°F) Storage: -25°C to +70°C (-13°F to +158°F)
Relative humidity:	Operating: < 80% non-condensing Storage: < 90% non-condensing

**Electromagnetic Compatibility**

EMC requirements:	USA: FCC Part 15, Class B
	EU: EMC directive 89/336/EEC
	Immunity: EN50130-4
	Emission: EN55022 Class B
	Harmonics: EN61000-3-2
	Voltage fluctuations: EN61000-3-3
Safety:	USA: UL60950
	EU: EN60950
	Canada: CAN/CSA - C22.2 - 60950-00



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